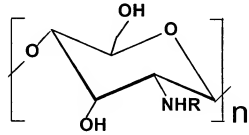
What is claimed:

1. Low molecular weight chitosan oligosaccharides comprised the characteristic structure of chitosan oligosaccharides that was prepared under microwave irradiation assisted electrolyte as follows:



wherein n of 3～150 standing for degree of polymerization, R of H and/or Ac, Mv of 600~30000Da.

2. A method for the preparation of low molecular weight chitosan oligosaccharides, which comprised:

1) Weighting quantitative chitosan powder.

2) Adding electrolyte solution (chitosan: electrolyte solvent (W/V) =1: 8~30) to the chitosan, then chitosan dissolved to viscous fluid.

3) Stirring viscous fluid to uniform, then after cap sealing to place in the microwave oven with microwave energy control to begin reaction.

4) The solution was adjusted to neutrality with 1~10 M NaOH, KOH or ammonia water and obtained pale yellow floc. Then the floc was settled beyond 30 min at 1~10 ℃ in cold closet.

5) The pale yellow floc in step 4) was filtered. The precipitate was desiccated at 50~70℃.

6) Dried product was crushed to 20~100 mesh and assayed the molecular weight of chitosan oligosaccharides (molecular weight 600~30000 Da) was taken as the finished product.

3. The method according to the claim 2, characterized in that in step 2) electrolyte solution was that adding the electrolyte to acid solution.

4. The method according to the claim 3, characterized in that the electrolyte may be NaCl, KCl, $CaCl_2$ or $FeCl_3$.

5. The method according to the claim 3, characterized in that the ionic strength of electrolyte acid solution was 0.01~0.1.

6. The method according to the claim 3, characterized in that Dilute acid may be hydrochloric acid, acetic acid, citric acid, tartaric acid, formic acid. Concentration of tartaric acid and citric acid was 0.5~4% (W/V) and that of hydrochloric acid, acetic acid and formic acid was 0.5~4% (V/V).

7. The method according to the claim 3, characterized in that the microwave energy was 480~800 W.

8. The method according to the claim 3, characterized in that the microwave irradiation time was 1~12 min.

9. The method according to the claim 2, 3, 7 or 8, characterized in that the acid solvent containing NaCl obtained range of molecular weight of the resultant to be 2.5×10^4~9.14×10^3 Da.

10. The method according to the claim 2, 3, 7 or 8, characterized in that the acid solvent

containing KCl obtained range of molecular weight of the resultant to be 2.0×10^4~6.02×10^2 Da.

11. The method according to the claim 2, 3, 7 or 8, characterized in that the acid solvent containing $CaCl_2$ obtained range of molecular weight of the resultant to be 1.8×10^4~4.79×10^2 Da.